



# Science: Year 5

This guide leads to full coverage of the 2019 Cayman Islands National Curriculum for Science including the content and working scientifically skills. Find all of the science resources centrally on the [“Teaching Resources Science for NC2019”](#) area in the “Files” area of your school’s “Teams” team.

Sequence	NC Content and Skills (bullet points correspond directly to FFT)	In-School Resources	External Resources
<p><b>Autumn 1</b></p> <p>Completed by October half-term break</p>	<p><b>Earth and Space:</b></p> <ul style="list-style-type: none"> <li>describe the movement of the Earth, and other planets, relative to the Sun in the solar system</li> <li>describe the movement of the Moon relative to the Earth</li> <li>describe the Sun, Earth and Moon as approximately spherical bodies</li> <li>use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky</li> </ul> <p><b>Working scientifically skills:</b> (Task 1: Sun Shadows)</p> <ul style="list-style-type: none"> <li>2. Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> </ul>	<p><b>Teams: “Year 5” folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Skills Assessment Task 1: Sun Shadows Skills video explanation</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>The Earth and the Sun (Y2 p78)</li> <li>Does the Sun move (Y2 p80)</li> <li>Changing shadows (Y2 P82)</li> <li>Day and night (Y2 84)</li> <li>Modelling day and night (Y2 86)</li> <li>Where does the Sun go at night? (Y5 p74)</li> <li>The Earth rotates on its axis (Y5 p76)</li> <li>The Earth’s orbit (Y5 p78)</li> <li>The Solar System (Y5 p80)</li> <li>Early astronomers and discoveries (Y5 p82)</li> <li>Space exploration today (Y5 p84)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b></p> <p>Science Investigations KS2 Earth and Space Earth Science</p> <p><b>Big Cat Science Readers</b></p> <p>Discover Mars (Yellow) Blast Off to the Moon (Blue) Let’s Go to Mars (Purple) Is There Anyone Out There? (White) Black Holes (Ruby) Super Stars (Emerald) The Traveller’s Guide to the Solar System (Sapphire) The Big Bang (Sapphire) Copernicus, Galileo and Newton (Pearl)</p>	<p><a href="#">Hamilton Trust “Space Presenters”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">Cayman Islands Astronomical Society</a></p> <p><a href="#">National Weather Service</a></p> <p><a href="#">Solar System Scope</a></p> <p><a href="#">Stellarium Web</a></p> <p><a href="#">Heavens-Above (ISS passes)</a></p> <p><a href="#">NASA SpacePlace</a></p> <p><a href="#">European Space Agency Kids</a></p> <p><a href="#">timeanddate.com (Sun and Moon times)</a></p>
<p><b>Autumn 2</b></p> <p>Completed by Christmas holidays</p>	<p><b>Forces:</b></p> <ul style="list-style-type: none"> <li>explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</li> <li>identify the effects of air resistance, water resistance and friction, that act between moving surfaces</li> <li>recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect</li> </ul> <p><b>Working scientifically skills:</b> (Task 2: Paper Helicopters)</p> <ul style="list-style-type: none"> <li>1. Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>6. Identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<p><b>Teams: “Year 5” folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Skills Assessment Task 2: Paper Helicopters Skills video explanation</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>Measuring force (Y6 p58)</li> <li>Weight and mass (Y6 p60)</li> <li>More about force, mass and weight (Y6 p62)</li> <li>Energy and movement (Y6 p64)</li> <li>Friction (Y6 p66)</li> <li>Air resistance (Y6 p68)</li> <li>Reducing friction (Y6 p70)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b></p> <p>Science Investigations KS2 Properties of Materials Changing Materials</p> <p><b>Big Cat Science Readers</b></p> <p>Pushing and Pulling (Pink A) Why Can’t Humans Fly? (White) Copernicus, Galileo and Newton (Pearl)</p>	<p><a href="#">Hamilton Trust “May the Forces Be With You”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">National Weather Service</a></p> <p><a href="#">Water Authority</a></p> <p><a href="#">Catboat Club</a></p>

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<p><b>Spring 1</b></p> <p>Completed by February half-term break</p>	<p><b>Properties and changes of materials:</b></p> <ul style="list-style-type: none"> <li>compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</li> <li>give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</li> </ul> <p><b>Working scientifically skills:</b> (Task 3: Hardness)</p> <ul style="list-style-type: none"> <li>4. Using test results to make predictions to set up further comparative and fair tests</li> </ul>	<p><b>Teams: "Year 5" folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Skills Assessment Task 3: Hardness Skills video explanation</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: "All years" folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>Properties of materials (Y3 p46)</li> <li>Hard of soft (Y3 p48)</li> <li>Strength (Y3 p50)</li> <li>Flexibility (Y3 p52)</li> <li>See-through or not (Y3 p62)</li> <li>Wet or dry? (Y3 p64)</li> <li>Magnets (Y3 p66)</li> <li>Magnets and metals (Y4 p84)</li> <li>Using magnets to sort metals (Y4 p86)</li> <li>Investigate conductors (Y6 p76)</li> <li>Conductors and insulators (Y6 p78)</li> <li>Metals are good conductors (Y6 p80)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b></p> <p>Science Investigations KS2 Properties of Materials</p> <p><b>Big Cat Science Readers</b></p> <p>From Tree to Book (Turquoise) A Finder's Guide to Rocks, Fossils and Soils (Topaz) How to Build a House (Sapphire) What if We Run Out of Oil? (Pearl)</p>	<p><a href="#">Hamilton Trust "Music Festival Madness"</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">National Trust for the Cayman Islands</a></p> <p><a href="#">Catboat Club</a></p>
<p><b>Spring 2</b></p> <p>Completed by Easter holidays</p>	<p><b>Properties and changes of materials:</b></p> <ul style="list-style-type: none"> <li>know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</li> <li>use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</li> <li>demonstrate that dissolving, mixing and changes of state are reversible changes</li> <li>explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda</li> </ul> <p><b>Working scientifically skills:</b> (Task 4: Dissolving Skittles)</p> <ul style="list-style-type: none"> <li>3. Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> </ul>	<p><b>Teams: "Year 5" folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Skills Assessment Task 4: Dissolving Skittles Skills video explanation</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: "All years" folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>What happens to substances dissolved (Y5 p42)</li> <li>Getting the solid out of a solution (Y5 p44)</li> <li>Reversible changes (Y6 p40)</li> <li>Irreversible changes (Y6 p42)</li> <li>Mixing and separating solids (Y6 p44)</li> <li>Mixing solids and water (Y6 p46)</li> <li>Investigate dissolving (Y6 p48)</li> <li>Solutions and suspensions (Y6 p50)</li> <li>Separating solids from liquids (Y6 p52)</li> <li>Mixing and separating in daily life (Y6 p54)</li> <li>Investigate conductors (Y6 p76)</li> <li>Conductors and insulators (Y6 p78)</li> <li>Metals are good conductors (Y6 p80)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b></p> <p>Science Investigations KS2 Changing Materials</p> <p><b>Big Cat Science Readers</b></p> <p>From Tree to Book (Turquoise) Blood (Lime) Breath (Topaz) The Water Cycle (Ruby) What if We Run Out of Oil? (Pearl)</p>	<p><a href="#">Hamilton Trust "Changing Materials"</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">Department of Agriculture</a></p> <p><a href="#">Department of Environmental Health</a></p> <p><a href="#">Cayman Islands Fire Service</a></p>

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<p><b>Summer 1</b></p> <p>Completed by Discovery Day in May</p>	<p><b>Living things and their habitats:</b></p> <ul style="list-style-type: none"> <li>describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>describe the life process of reproduction in some plants and animals</li> </ul> <p><b>Working scientifically skills:</b> (Task 5: Growing Celery)</p> <ul style="list-style-type: none"> <li>5. Reporting and presenting findings from enquiries, including conclusions, causal relationships, and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> </ul>	<p><b>Teams: “Year 5” folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Skills Assessment Task 5: Growing Celery Skills video explanation</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>Babies and adults (Y1 p44)</li> <li>Plants can make new plants (Y5 p6)</li> <li>From flower to seeds (Y5 p8)</li> <li>Insects and flowers (Y5 p10)</li> <li>Seeds around: wind, water, explosion (Y5 p12)</li> <li>Seeds around: animals (Y5 p14)</li> <li>The life cycle of a plant (Y5 p24)</li> <li>Stages in the life cycle (Y5 p26)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b></p> <p>Science Investigations KS2 PSHE Life Cycles</p> <p><b>Big Cat Science Readers</b></p> <p>What’s in the Egg? (Lilac) My Family Tree (Pink A) What’s Inside? (Red A) The Oak Tree (R Red B) Growing and Changing (Blue) The Gardening Year (Orange) Fabulous Creatures – Are They Real? (Lime) Mega Plants (Copper) Plants, Pollen and Pollinators (Topaz) The Life Cycle of a Polar Bear (Ruby) The Incredible Life of David Attenborough (Sapphire) Life Cycles (Sapphire) The Life Cycle of the Orca (Sapphire) The Story of the Wolf (Diamond) The Mysterious World of Micro-organisms (Pearl) Coral Reefs (Pearl)</p>	<p><a href="#">Hamilton Trust “The Art of Living”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">Health City Cayman Islands</a></p> <p><a href="#">Health Services Authority</a></p> <p><a href="#">Department of Agriculture</a></p> <p><a href="#">Central Caribbean Marine Institute</a></p> <p><a href="#">National Trust for the Cayman Islands</a></p> <p><a href="#">Department of the Environment</a></p>
<p><b>Summer 2</b></p> <p>Completed by Summer holidays</p>	<p><b>Animals, including humans:</b></p> <ul style="list-style-type: none"> <li>describe the changes as humans develop to old age.</li> </ul>	<p><b>Teams: “Year 5” folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>Babies and adults (Y1 p44)</li> <li>Life processes (Y3 p24)</li> <li>Growing bones (Y4 p6)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b></p> <p>Science Investigations KS2 PSHE Our Body Life Cycles</p> <p><b>Big Cat Science Readers</b></p> <p>Teeth (R Pink A) My Family Tree (R Pink A) Growing and Changing (Y1 Blue) Life Cycles (Y5 Sapphire)</p>	<p><a href="#">Hamilton Trust “Life Explorers”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">Health Services Authority</a></p> <p><a href="#">Health City Cayman Islands</a></p>